

In the specification:

Please replace paragraph [0017] with:

[0017] Referring now to Figures 1 and 2, during movement of the wheel 14 between the beginning 18 and end 22 of the conveyor 12, the wheel 14 passes through an identification, or gauging station 24. The identification station 24 can include a camera 26 for identifying the wheel 14 from a plurality of differently configured wheels. When a wheel 14 moves within the visual range of the camera 26, the camera 26 communicates an image of the wheel 14 to a controller 28. The image includes structural features of the wheel 14 including the position of the valve stem aperture. The location of the valve stem aperture relative to the identification or gauging station 24 is thus determined. The controller 28 compares the image received from the camera 26 with a plurality of images stored in memory. The images in memory correspond to all of the differently configured wheels that can pass through the identification station 24. Each of the images stored in memory is associated with structural characteristics and physical dimensions of a corresponding wheel 14. The controller 28 controls processing steps performed downstream of the identification station 24 based, at least in part, on the physical dimensions of the wheel 14 identified from the image received from the camera 26.

Please replace paragraph [0021] with:

[0021] Referring now to Figures 1 and 6, after the wheel 14 is positioned adjacent the robotic apparatus 16 by the positioning device 40, the robotic apparatus or manipulator 16 operably engages and inserts a valve stem in the valve stem aperture defined by the wheel 14. As shown best in Figure 6, the robotic apparatus 16 is a programmable robotic manipulator having an arm capable of compound, multi-axial movement. The robotic apparatus 16 moves a locating and inserting assembly 90 around the wheel 14, shown schematically in Figures 1 and 6. The assembly 90 receives valve stems from one or more valve stem feeding stations 92 disposed along the conveyor 12. Each station 92 includes a hopper 94 for receiving valve stems and a sorting device 96 for sorting the valve stems and arranging the valve stems in an orientation to be received by the assembly 90. The different valve stem feeding stations 92 sort different configurations of valve stems. A nut runner 98 is attached to the assembly 90 to insert nuts on valve stems that require nuts. The nut runner 98 receives nuts from a nut feeding station 100 through a conduit 102. The station 100 can be disposed along the conveyor 12.

Please replace paragraph [0024] with:

[0024] Referring now to Figure 8, the assembly 90a is stopped after passing the valve stem aperture 118. Due to the delay between sensing the light by the first receiver 110a,

signaling the controller 28, the assembly 90a typically passes the aperture 118 prior to stopping the robot 16. The assembly 90a is moved in the direction 124 until the light receiver 110b receives light from the light emitter 108b through the valve stem aperture 118, shown in Figure 9. In response to the communication between the light receiver 110b and the light emitter 108b through the valve stem aperture 118, the assembly 90a is moved in the direction 122 until the valve stem holding pin 112 is aligned with the aperture 118 and the valve stem is then inserted, as shown in Figure 10. In other words, the central axis of the aperture 118 and a longitudinal axis of the valve stem are coaxially aligned with respect to one another prior to insertion of the valve stem through the aperture 118. The assembly 90a moves much faster in the direction of arrow 122 than in the direction of arrow 124 because more distance is typically traveled to first locate the aperture 118. Once the aperture 118 is located, the assembly moves at a slower rate in the direction of arrow 124 to determine a more precise location of the aperture 118 prior to aligning the stem holding pin 112a with the aperture 118.